



#### STS-113 FLIGHT READINESS REVIEW

FERRY READINESS October 31, 2002



### SPACE SHUTTLE PROGRAM Space Shuttle Vehicle Engineering Office NASA Johnson Space Center, Houston, Texas



# STS-113 Flight Readiness Review Ferry Readiness

Presenter	Don L. McCormack, Jr.		
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#### Ferry Plan Summary

- Ferry Planning Readiness Review conducted on 10/24/02 with no issues identified
- Ferry Flight Readiness Review to be conducted one day prior to planned ferry date
- Hardware summary:
  - Orbiter: OV-105 (Endeavour)
    - NEOM ferry weight (lbs): 200908 (no fluids off-loaded)
    - NEOM ferry center of gravity (in): Xo 1126.4 Yo -0.4 Zo 370.6
      - » NEOM mass properties are within specified limits Orbiter middeck ballast is not required
  - Attach hardware and ferry plugs are ready to support
  - Tailcone 2 ready to support
  - Shuttle Carrier Aircraft (SCA): NASA 905 is ready to support
- Configuration drawings have been released



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#### Ferry Plan Summary - Continued

- DFRC seven day turnaround with ready-to-ferry on morning of day eight
  - DFRC contamination issue is not expected to impact the start of ferry operations
- Flight plan
  - Two flight legs that will be performed over 2-days
    - Not enough daylight hours to complete the mission in 1-day
- Prime landing sites, weather alternates and emergency landing fields selected
- Pathfinder: USAF C-141 or C-17 (purge equipment required)
- Purge purge equipment will be deployed due to the potential for low temperatures at ferry overnight stop locations
  - Purge circuit 1 (OMS/RCS ambient air temperature below 45 °F for greater than 2 hours)
  - Purge circuit 2 (not required for this mission)



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#### **STS-113 FERRY READINESS STATEMENT**

A Ferry Planning Readiness Review was conducted in accordance with the Space Shuttle Vehicle Engineering Office flight preparation process plan contained in NSTS 08117, Requirements and Procedures for Certification of Flight Readiness. This certifies that aircraft, equipment, and ferry requirements are ready to support Orbiter ferry operations.

Don L. McCormack, Jr. MV/Manager, Ferry Operations